Cotton/Soybean Insect Newsletter

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Pest Patrol Alerts

The information contained herein each week is available via text alerts that direct users to online recordings. I will update the short message weekly for at least as long as the newsletter runs. After a new message is posted, a text message is sent to alert users that I have recorded a new update. Users can subscribe for text message alerts for my updates in two easy steps. Step one: register by texting **pestpat7** to 97063. Step two: reply to the confirmation text you receive by texting the letter "y" to complete your registration. Pest Patrol Alerts are sponsored by Syngenta.

Updates on Twitter

When noteworthy events happen the in the field, I will be sending them out quickly via Twitter. If you want to follow those quick updates, follow me at @bugdocisin on Twitter.

News from Around the State

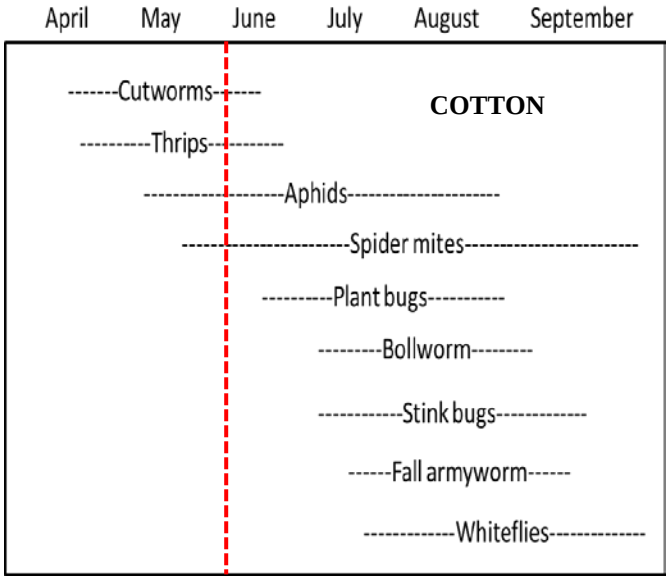
Jonathan Croft, county agent covering Orangeburg County, sent this photo of immature kudzu bugs in kudzu last week, so they are still out there. Despite the fact that the fungus *Beauveria bassiana* has all but eliminated this species as an economic pest of soybeans here, it could potentially bounce back, particularly in new fields of soybeans that have not been planted to soybeans in years (therefore, not having the fungal strain in the soil at high levels). You might want to check those fields, in particular. Also, check for threecornered alfalfa hoppers (TCAH) when you are checking early beans for kudzu bugs and other potential early problems with insects. Don't just start checking soybeans for insects after bloom. Much happens early, and I think we miss a lot of damage from TCAH early. **Jay Crouch**, county agent covering Newberry and Saluda Counties, reported that "cotton is relatively trouble free as of now, treating for grasshoppers in some soybean fields as needed." Other agents are reporting that it is mostly "quiet" regarding insect issues right now.

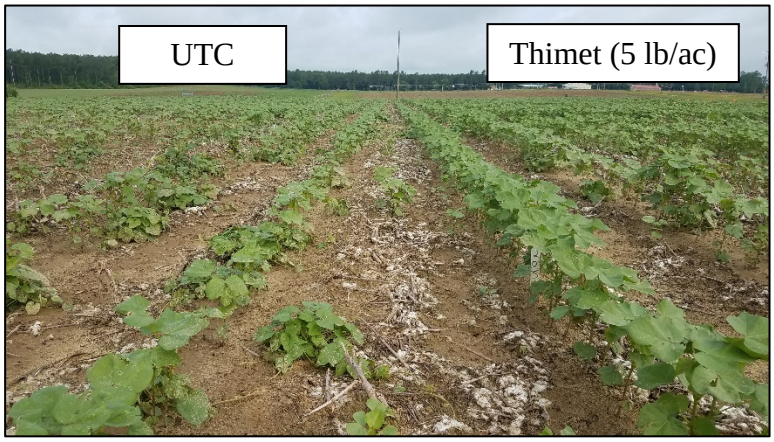
Cotton Situation

As of 4 June 2017, the USDA NASS South Carolina Statistical Office estimated that about 90% of the crop has been planted, compared with 77% the previous week, 86% at this time last year, and 88% for the 5-year average. The condition of the crop was described as 9% excellent, 70% good, 21% fair, 0% poor, and 0% very poor.

Cotton Insects

After the rains, cotton is growing rapidly now, and thrips will not be an issue much longer. Data from our planting date work with thrips showed that thrips numbers decline steadily in June. Remember, most cotton after the 4th true leaf will not benefit from an insecticide application for thrips. Most of our thrips pressure can be described as 'light-to-moderate' for the southern areas of the Coastal Plain, with higher pressure reported from the Pee Dee Region. Many of our at-plant insecticides (seed treatments and in-furrow applications) provided good control of thrips this season. For example, here is some cotton treated phorate (Thimet) at planting (right) compared with the UTC (left). Late spraying can flare aphids, spider mites,





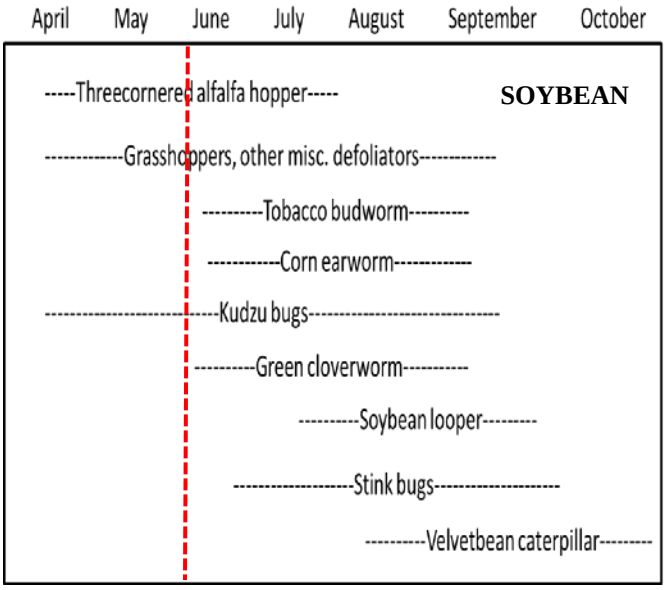
(notice the white insects – these are larvae of a species of lady beetle that feed on aphids). So, unless you have significant issues with aphids or plant bugs, most cotton will not need insecticide from now until after bloom. As you know, that doesn't mean that you get to completely ignore the crop for a few weeks. In addition to checking for aphids, spider mites, and anything else that might show up, we need to monitor for square retention and check for plant bugs. Tarnished plant bug (TPB), cotton fleahoppers, and other mirids, such as the clouded plant bug, can contribute to early fruit loss. Monitor square retention, and look for reasons why it dips below 80%.

or some other insect pest that might otherwise not be an issue. Right now, we have aphids in most of the older cotton (photo below from Andrew Warner, county agent in Hampton County), and most of them will serve as food for a developing population of natural enemies to help us later with bollworm and stink bugs

I like to examine the presence or absence of the first position square on the 3rd node down from the terminal. If you look at this one position on multiple plants weekly, you can monitor for issues with plant bugs. However, do not use just this method, as you will want to look down in the developing canopy for issues there also and check for TPB with a sweep net or drop cloth. As you know, we can have physiological loss of fruiting positions due to alternating rain and drought events and hot and cooler temperatures. Cotton sheds a lot of fruiting positions based on the environment, so we have to monitor for insects that might be contributing in order to differentiate between biotic (insects, disease, etc.) and abiotic (rain, temperature, herbicide injury, fertility issues, etc.) stresses. The best thing to put on crops, and you can apply it as often as you want, is the shadow of someone looking for problems.

Soybean Situation

As of 4 June 2017, the USDA NASS South Carolina Statistical Office estimated that about 57% of our soybean crop has been planted, compared with 41% the previous week, 64% at this time last year, and 59% for the 5-year average. About 39% of the crop has emerged, compared with 26% the previous week, 43% at this time last year, and 43% for the 5-year average. These are observed/perceived state-wide averages.



Soybean Insects

Soybeans are still being planting and establishing stands in fields, so we are early for most insect problems. Some issues are still being reported with grasshoppers. Any soybeans that were planted early are now susceptible to stem feeders such as kudzu bugs (covered in '*News from Around the State*') and threecornered alfalfa hoppers (TCAH). Now is the time to notice TCAH (nymph and adult pictured below). Treat only if numbers of TCAH reach several per rowft or sweep and feeding damage (girdling of stems) is observed. Pyrethroid insecticides typically do a fine job in controlling TCAH. Also, I took a photo of a tobacco budworm (TBW) moth on a plot stake (right). Numbers in pheromone traps have gone up, and TBW can be important in soybeans, so start watching for moth activity in soybeans. Finally, deer continue to be a significant issue in soybeans in many areas of the state. Arrgghhh!!!!!

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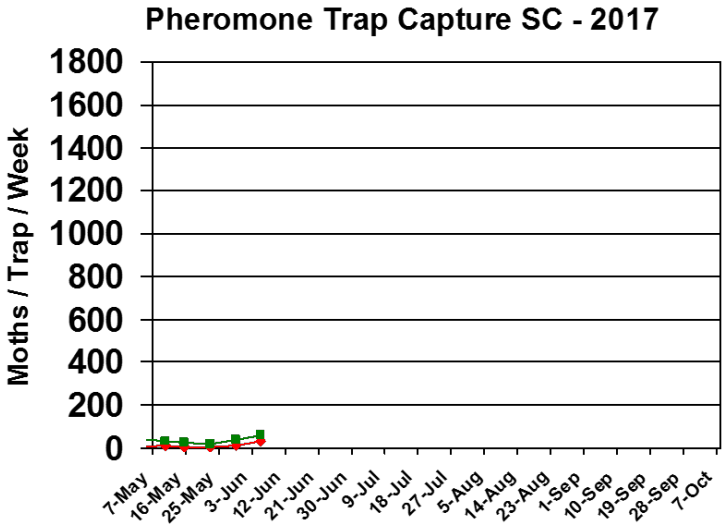
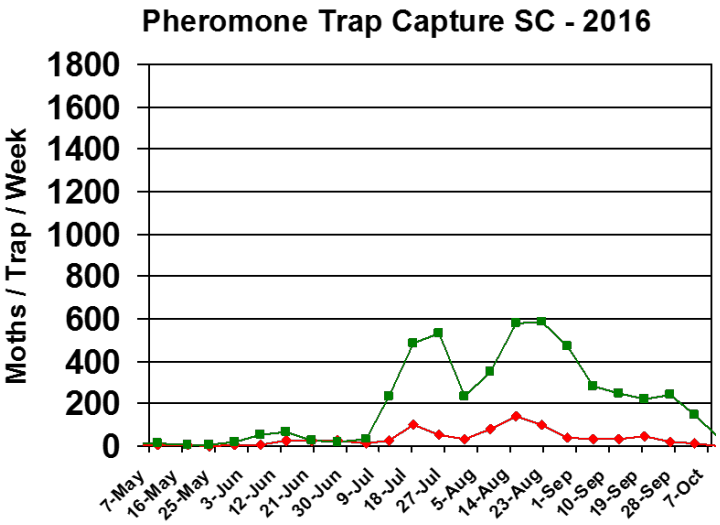
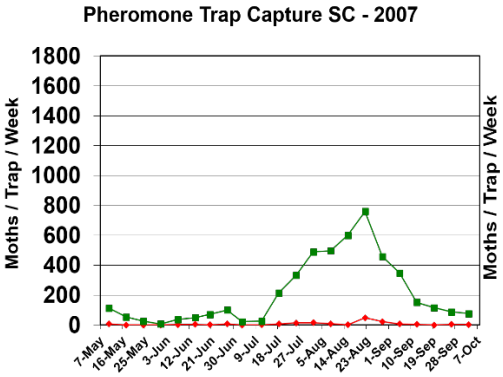
Bollworm & Tobacco Budworm

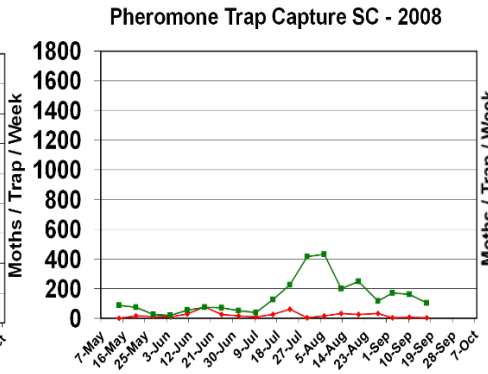
Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2016 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state.

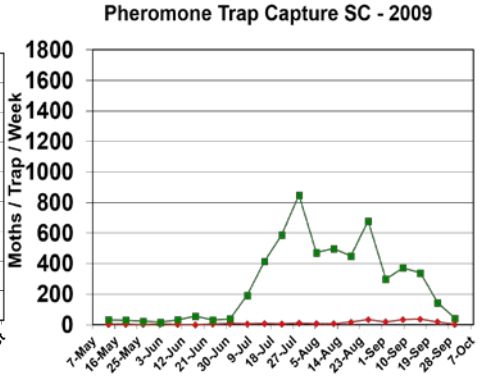


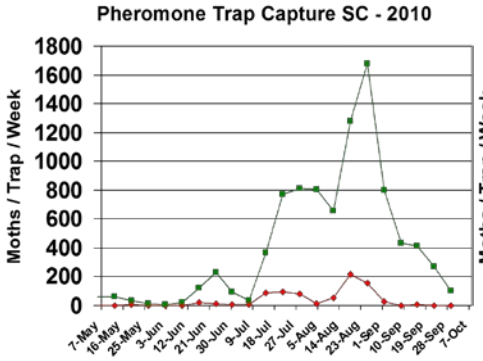


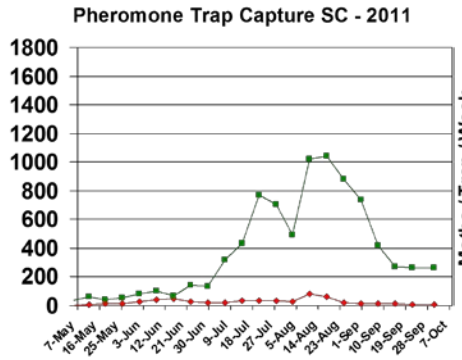
Trap data from 2007-2015 are shown below for reference to other years of trapping data from EREC:

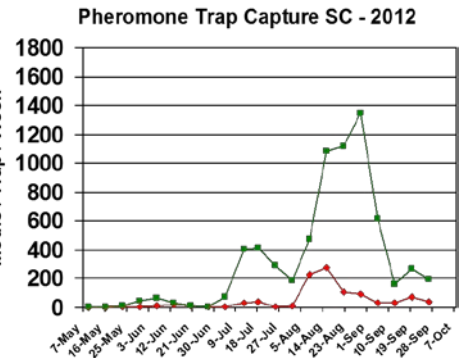


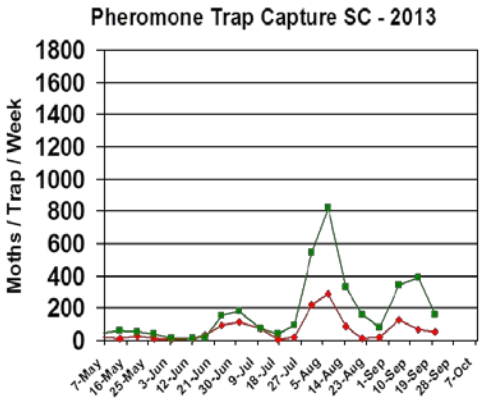


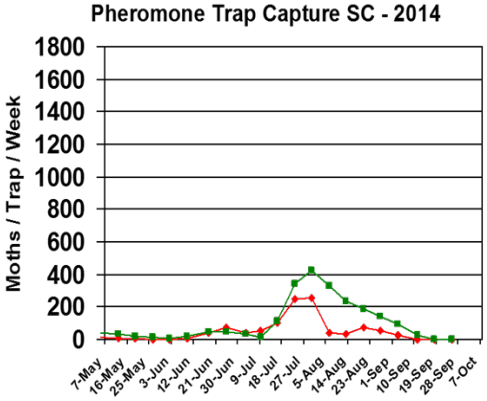


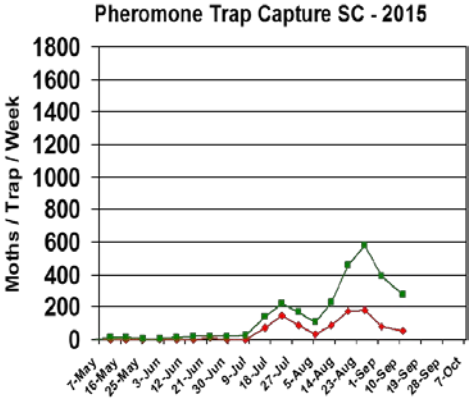












Pest Management Handbook – 2017

Insect control recommendations are available online in the 2017 South Carolina Pest Management Handbook at: http://www.clemson.edu/extension/agronomy/pest%20management%20handbook.html

Free Mobile Apps: "Calibrate My Sprayer" and "Mix My Sprayer"

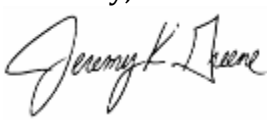
Download our free mobile apps called "Calibrate My Sprayer" and "Mix My Sprayer" that help check for proper calibration of spraying equipment and help you with mixing user-defined pesticides, respectively, in custom units (available in both iOS and Android formats): http://www.clemson.edu/extension/mobile-apps/

Need More Information?

For more Clemson University Extension information: http://www.clemson.edu/extension/

For historical cotton/soybean insect newsletters:
http://www.clemson.edu//extension/agronomy/cotton1/newsletters.html

Sincerely,



Jeremy K. Greene, Ph.D.
Professor of Entomology

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